

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018295**Date Inspected:** 24-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

**OBG # TRIAL ASSEMBLY YARD (11EE)**

This QA Inspector along with QA inspector Mr.Manjunath S Math performed dimensional joint survey inspection after heat straightening on the floor beam to verify the flatness using 1500mm straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11EE – PP 107 and PP 108

**OBG # TRIAL ASSEMBLY YARD (11DE-11EE)**

This QA Inspector along with QA inspector Mr.Manjunath S Math performed dimensional joint survey inspection on the WT stiffeners to verify the horizontal and vertical offset using 1000mm straight edge and bridge cam gauge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11DE to Segment 11EE – PP 106 to PP 107

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OBG # TRIAL ASSEMBLY YARD (Lift 11E)

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated an MT report for this date. The members are identified as light brackets. The weld designations reviewed are as follows:

LB4-003-044 and 058

LB4A-003-006

LB4-002-044 and 058

LB4A-002-006

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (11DW-11EW)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 009 in the (3G) vertical position on side panel piece mark no. OBW11C. The location was the transverse splice weld joining side panel of segment 11DW and 11EW at crossbeam side. The welder ID was 046709. The welding was performed against critical welding repair report B-CWR2269 Rev.0. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G (3F)-FCM-Repair-1.

OBG # TRIAL ASSEMBLY YARD (11DW-11EW)

The QA inspector observed the heat straightening operation on longitudinal diaphragm. The location was the crossbeam side of segment 11DW and 11EW. The heat straightening was performed against heat straightening report HSR1 (B)-9552 Rev.0 dated 07th Oct. 2010. The heat straightening operation appeared to be in general compliance with the contract specifications.

OBG # TRIAL ASSEMBLY YARD (11DE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 077 in the (4G) overhead position on deck panel 'I' Rib extension piece mark no. SEG072D. The location was the 'I' stiffener fillet weld of segment 11DE-FL3. The welder ID was 040656. The welding variables recorded by QC appeared to comply with the WPS-B-P-2114-FCM-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 024 in the (4G) overhead position on deck panel 'I' Rib extension piece mark no. SSD24-PP104.5. The location was the 'I' stiffener fillet weld of segment 11DE-FL3. The welder ID was 044551. The welding variables recorded by QC appeared to comply with the WPS-B-P-2114-FCM-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 113 in the (4G) overhead position on deck panel 'I' Rib extension piece mark no. SEG072D. The location was the 'I' stiffener fillet weld of segment 11DE-FL3. The welder ID was 041713. The welding variables recorded by QC appeared to comply with the WPS-B-P-2114-FCM-1.

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Manikandan,Murugan	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

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